

## Installation of TH 19X Thermostat in TH 180 AP and TH 182 AP Aspirator Wall Box



### Product Description

These instructions describe the recommended method for replacing the thermostat in the TH 180 AP or TH 182 AP Aspirating Wall Box with a TH 19X Thermostat using the 192-648 Aspirator Adapter Kit. The TH 180 AP/TH 182 AP has only two air line connections; therefore, 1-pipe and 3-pipe devices should not be installed in it.

### Product Number

192-648

### Warning/Caution Notations

<b>WARNING</b>		Personal injury/loss of life may occur if a procedure is not performed as specified.
<b>CAUTION</b>		Equipment damage, or loss of data may occur if the user does not follow procedure as specified.

### Installation

#### Disassembly

**NOTE:** The numbers found in parentheses in this procedure correspond to the numbers shown in *Figure 1*. See *Table 1* for a parts list of the Aspirator Adapter Kit.

1. Using a special key wrench (180-575), remove and discard the old cover.
2. Remove the two screws holding the old thermostat in place and remove the thermostat.



**CAUTION:**

Supply air will bleed out of the terminal until new thermostat is installed.

3. Remove the five screws (5) holding the old terminal plate (4) and gasket (2). Remove the terminal plate and gasket. Discard the gasket.

**Table 1. 192-648 Aspirator Adapter Kit Parts List.**

Item	Description	Quantity
1	Filter	1
2	Gasket	1
3	O-rings	2
4	Terminal plate	1
5	Screws 4-40 x 1/2-inch long	5
6	Screws 4-40 x 1-inch long	2
7	Tubing retainer	1
8	Aspirator nozzle	1
9	Aspirator plate	1
10	Seal gaskets	3
11	Cover	1
12	Cover screws 6/32 x 1-3/8 inch long	2
13	Spacer post	2

### Assembly

**NOTE:** The numbers found in parentheses in this procedure correspond to the numbers shown in *Figure 1*. See *Table 1* for a parts list of the Aspirator Adapter Kit.

1. Replace the supply air filter (1) with the new filter provided in the kit.

**NOTE:** Be sure the gasket fits over the two locator posts.

2. Make sure the gasket surface is clean. Place the new gasket (2) into the wall box.
3. Make sure the two O-rings (3) have been placed into the circular recesses located in the back of the new terminal plate (4). Place the terminal plate over the gasket (2) and fasten it securely to the wall box with the five screws (5) provided. The new plate is slightly longer than the old. Do not cut the insulation; it will compress when the plate is fastened.

**NOTE:** The wall plate provided with the thermostat is not used in this installation.

## Installation, Continued

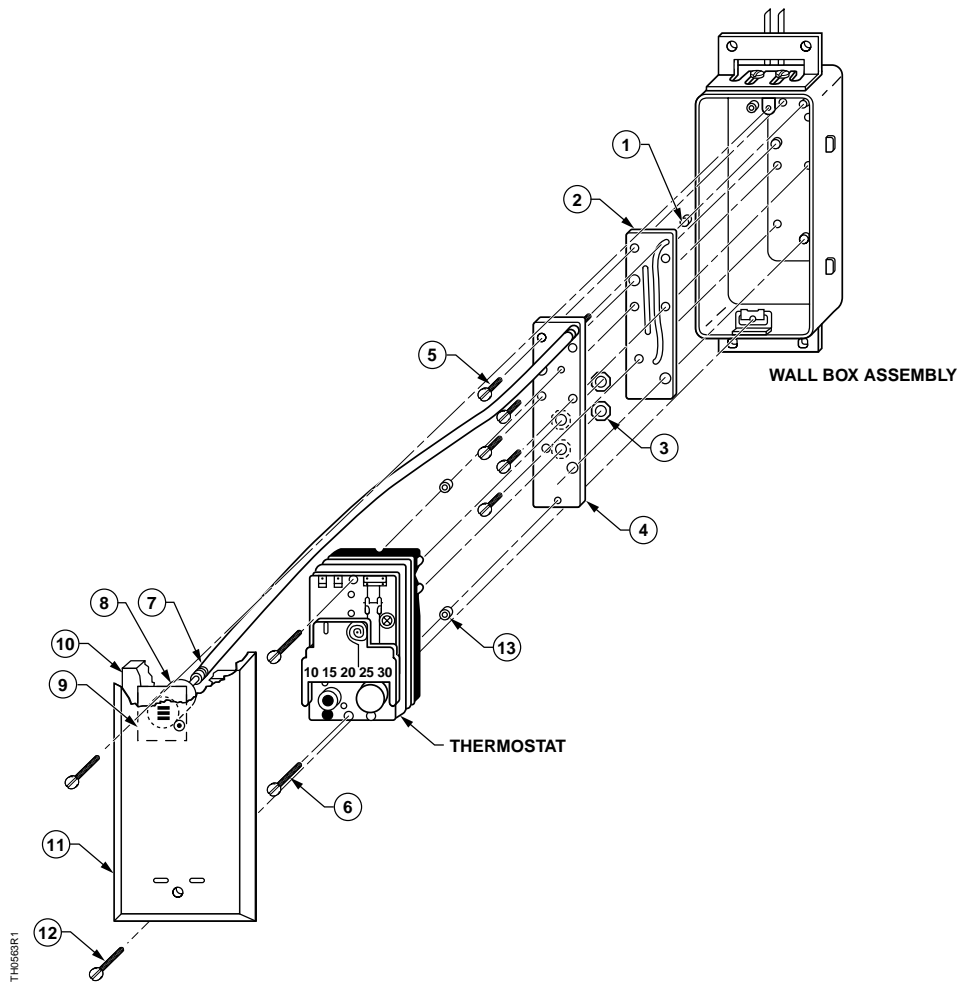


Figure 1. TH19X and Aspirator Wall Box

- Carefully plug the thermostat into the terminal plate (4). Wet or moisten the thermostat supply and return ports to facilitate plugging the thermostat into the O-rings located in the terminal plate. This will lubricate the O-rings and allow the thermostat ports to slip through them more easily.
- Insert two screws (6) through the thermostat. Place two spacers (13) over the ends of the screws (6). Seat the spacers into the recesses located in the base of the thermostat. Secure the thermostat to the wall box. When tightening the screws, make sure the lock washers are not fully compressed.



### CAUTION:

Over-tightening the screws can cause a shift in the calibration.

- Set the thermostat to the desired setting
- Remove the screw and nut holding the aspirator plate (9) to the back of the new cover (11). Insert the aspirator nozzle (8) through the aspirator plate and reattach it. Tighten until finger tight. Align holes on the aspirator plate (9) and cover (11) and fasten securely.

8. If the distance from the back of the wall box (inside) to the mounting surface exceeds 1-9/16 inch (14 mm), the cover mounting screws (12) will be too short. Use two 141-359 spacer posts to correct this problem.
9. Connect the tubing on the terminal plate to the nozzle fitting (8). A wire coil, which will help prevent kinking, is provided inside the tubing. Slide the tubing retainer (7) over the fitting to secure the connection.
10. If there is a sealing gasket on the surface around the wall box, remove and discard it. Make sure the surface is clean. Three new seal gaskets (10) are already attached to the back of the new cover.
11. Position the cover (11) over the wall box. Be sure the tubing does not press against the thermostat bimetal. Tighten the two socket head cover screws (12) with a 5/64-inch (2 mm) hex Allen wrench until the seal gaskets are compressed and the cover is tight against the mounting surface.



**CAUTION:**

There must be a tight seal between the cover and the wall box to have proper air flow over the bimetal sensor.

## Accessories

Aspirator Restrictor Kit	180-873
Special Key wrench	180-575
Spacer Post	141-359

## Reference

Specifications, application, operation and installation of thermostats

*155-065P25 (TH 192-1)*

*155-066P25 (TH192-2)*

*155-067P25 (TH192-3)*

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